USB 2.0 IP Device Server

User Manual

English



LINDY No. 42829



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1. Introduction

The USB 2.0 DEVICE SERVER Combo solution not only allows you to add storage space onto your home or office network but also allows you to work with the remote USB devices over a local network as if they were connected directly to your local PC.

Key Features of the application are

- Integrated USB-IP and NAS solution
- USB Port 0 and Port 1 are USB NAS ports. Any Mass storage devices connected to these ports will be detected as NAS drives
- The USB Port 2 and Port 3 are USB-IP ports, any device connected to these ports can be virtualized on to the client PC
- Allows USB Devices to be used and shared by client PC's on LAN
- Supports wide variety of USB devices
- Supports Ethernet networks 10/100Base-T via RJ-45
- Supports printer auto-reconnect while sharing the printer from Client PC's
- Supports auto sharing of USB devices
- Supports USB device safe removal
- User-Friendly application interface

The USB 2.0 Device Server solution enables on-the-go connection of USB Storage drives onto the 2 USB ports.

The USB Port 0 and Port 1 are USB NAS ports. Any Mass storage devices connected to these ports will be detected as NAS drives and needs to be manually shared onto the network. Any other device connected to these ports will not be detected or available.

The USB Port 2 and Port 3 are USB-IP ports, any device connected to these ports can be virtualized on to the client PC using the USBIP ADMIN Utility.

Access to the Network disks USB can be password protected and can be securely accessed over the network. The USB 2.0 Device Server Application has IPSec feature which utilizes the built-in Hardware Encryption Block to establish a Virtual Private Network (VPN) on-the-wire security.

2. Windows utility

The USBIP Admin utility Setup is an Install Shield based application, which can be used for installing, uninstalling and upgrading the Client Software for the USB 2.0 Device Server. Please run the self-explanatory Install shield application to install the Admin Utility.

The Admin utility is an application, which virtualizes the devices that are connected on the remote USB-Server. The USBIP Admin utility can also be used for configuring the USB server device (on the board).

2.1. TheVirtual USB-IP Driver Software

This contains a Virtual Bus Enumerator driver & Virtual Bus driver. These drivers will help in vitalizing the USB devices, for each attached device on the USB-Server.

Virtual Bus driver takes the USB traffic from the USB Client drivers and passes it to the USB-Server, which is sitting remotely on the network.

As soon as the utility is installed this application icon will be placed in the system tray as shown in the figure below.



Double click the icon on the system tray to view the Full screen mode of the PC client application as shown below.

Sussip Admin		tiele					
Elle Functions De	evice Mapping Vie						
0			Device Mapping			Server Details	
Device Mapping	Device Info		Port	Class	Status		
Server Manager							
	<		liin.				2
S.No	Date : Time	Description					
<		server all	1107				>
Device Mapping L	og Server Manag	er Loo I				2/8/2007 16:41:27	

The application has four panels, which are docked in the application.

- 1) Main window: This displays all the Device server and the USB Devices connected on them
- 2) Function Panel: This panel enables to switch between the Device Mapping and Server Manager Application.
- 3) Device Details Panel: This displays the more verbose information of the server and the device selected on the main window.
- 4) Log panel: Any event on the USB server creates a log in the Log panel. This helps in continuous monitoring of USB device servers on the network.

The Admin Utility has two main functionalities built in

- a) Device Mapping
- b) Server Manager

2.2. Device Mapping

Device Mapping enables virtualization of all USB Devices connected to the USB 2.0 DEVICE SERVER unit in your LAN on your local PC.

Click on the Green Arrow Button in the Admin utility to start the device mapping, which will automatically start the 'Found New Hardware' wizard to install the Virtual USB driver.

Continue the Add New Hardware wizard to install the Virtual USB driver for the USB 2.0 DEVICE SERVER Admin utility.

Select "Search for a suitable driver for my device (recommended)" and click on 'Next', the Operating System automatically will search for the driver until the Virtual USB over IP driver is installed.

Please Click on "Continue anyway" if a Windows dialog pops up about the Digital Signature as shown below.

<u>!</u> }	The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP. (<u>Tell me why</u> this testing is important.)
	Continuing your installation of this suftware may impain or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the software vendor for software that has passed Windows Logo testing.

Power on the USB 2.0 DEVICE SERVER board and connect an Ethernet cable from the USB 2.0 Device Server Ethernet port to your Local Area Network.

The USBIP Admin utility is capable enough to identify the USB 2.0 DEVICE SERVER USB servers by it's IP address on the network. As soon as the USB 2.0 DEVICE SERVER box is detected with a specific IP address the Windows automatically invokes a Found New Hardware Wizard to install the drivers for the USB server box.

NOTE: For proper enumeration of device remove the Firewall from the Windows Machine.

Continue the Installation to see the USB 2.0 DEVICE SERVER board and the USB devices connected in the Admin utility as shown below.

🚭 USBIP Admin							
Eile Functions Devic	e Mapping View	Help					
🔿 🔇	. Pa d	ý 🔞					
Ø		Device I	Mapping			Server Details	
<u></u>	Device Info		Port	Class	Status		
Device Mapping		3.22 (Loaded Successfully)					
Server Manager							
	<	EI.				> <	>
S.No Da	ite : Time	Description					
	2007 : 16:42:15	Started Device Mapping Function					
	2007 : 16:42:21	Informed New Server 192,168.3 Server (192,168,3,22) Arrival No.		neeful II			
02.004	1009 - 10096.21	ourse from roototed wind no	20110-001001-0000	and de lander, rif			
¢							>
Device Mapping Log	Server Manager	Log					
			2.168.3.22)	Arrival Notificatio	on Successful.!!	2/8/2007 16:42:29	li

In the Device mapping window, all the USB devices are shown as a tree under the USB Server.

Right click on any device and click on "Connect" to virtualize that USB device onto your PC as shown below .

le Functions De	vice Mapping View Help			
B	Device	Mapping		
CH.	Device Info	Port	Class	Status
Device Mapping	🖃 💭 192.168.3.22 (Loaded Successfully)	1 10-12013 III.	10000000	0.0000000
11/10 20	Vid_0d8c&Pid_0001	514	Audio	Connected
1 Aller	- 🚓 Vid_046d&Pid_0840	515		
1				
~			Disconne	ect
Server Manager			°G -	

2.3. Server Manager

0		Serv	er Manager - Fou	und 0 Servers(s)	Server Details
vvice Mapping	S.No.	Model	MAC Address	IP Address	Status	Connected Clients (IP : USB Po
.No	C Date : Time	Descrip			>	

The Server manager enables the Administrator to configure the USB 2.0 Device Server via the network.

The Server Manger also has an option to search for the device on the Network:

Right Click on the Server Manager Main window and Click on Search server as shown below .

		Serve	r Manager - Fou	Ind 0 Servers(s)
evice Mapping	S.No.	Model	MAC Address	IP Address	Status
rver Manager			Search Servers	_	
		8	Unlock Upgrade Eirmware Server Configuration Restore Factory Defaul		

The dialog 'Searching for Servers' dialog will appear and list all the USB 2.0 Device Server devices on the Network as shown below

	or Servers ver(s), remaining time = 1	second(s)	X Stop
No	Model	MAC Address	IP Address
1	WCS8140-1	0-50-c2-1b-70-2f	192.168.3.22

The USB Device Server search is password protected and should be unlocked in order to configure the selected device.

		Serv	er Manag	er - Found 1 Servers(s)	Server Details	
S.,	S.No.	Model	MAC Ad	dress IP Address	Status		
pring	1	MCS8149-1	0.50-	Search Servers	Locked		
5			1	0 Unlock			
			1	Litrar adie Getoware			
ger .			1	Servir Configuration			
			1	Entern Pattery Cellaits			
			100		1		
						Connected Clients (IP : USB F	Nort)
	10						
_	4			141	*		
	ate : Time	Descrip					
02-06	2007, 17:01 3-2007, 17:01	25 T Server	is found II s) Found				

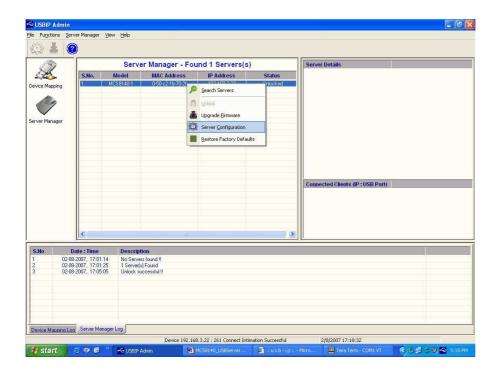
On selecting 'Unlock' the password dialog pops up as shown below. Key in the password in the 'Password' dialog. **The default password for the USB IP Server is "combo"**

	-Enter Password		1
		ç.	
2 S	<u> </u>		

If the Authentication has been successful an 'Unlock OK' dialog appears. The Device server can now be configured for various settings as given below.

2.3.1. Server Configuration

The Server Manager has an option to change Server Configuration settings through USBIP Admin Utility. To open server configuration window right click on the USB 2.0 DEVICE SERVER server displayed on the Server Manager Main window and select "Server Configuration" option as shown below.



The Server Configuration window will appear as shown below.

nformation	Basic Settings IP Settings	Password	
MCS8140	Modify		
Mac Address:	Server Name:	moschip	
00:50:c2:1b:70:2f			
Serial Number :			
60000			
Firmware Version :			
1.0.0.13			-

Basic Settings:

The Basic Settings page allows you to specify a server name. Check the modify box and enter server name as shown below.

formation	Hasic Settings IP Settings Password	
Model Name : MCS8140	Modify	
Mac Address : 00:50:c2:1b:70:2f	Server Name: IISBIP	-i
Serial Number :		
180001		
Firmware Version :		
1111111		
5 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T 1 T		22

IP Settings:

The IP Settings page allows you to modify MCS 8140-D box IP Address as shown below.

ormation Model Name .	Basic Settings IP Settings Password
MCS0140	IT Modifie
Mac Address : 00:50:c2:1b:70:2f	IP Curfiguration. Static
Gerial Number :	IP Address: 1922/2 168 3 3 222
60000	Subnet Mask. 255 . 255 . 0
Tirriware Version : 1.0.0.13	Gate Way: 192 . 168 . 3 . 1

The Default IP Address is 192.168.3.22

To modify the IP Address of the USB 2.0 DEVICE SERVER box, check the 'Modify' box and Select IP Configuration (Select IP configuration Static/DHCP from IP Configuration drop-down box) as shown below.

Model Name :		
	Second as	
MCS8140	Modify	
Mac Address :	IP Configuration:	Static
00:50:c2:16:70:2f	The Configuration.	DHCP
Serial Number :	IP Address:	Static
60000	Subnet Mask	255 . 255 . 255 . 0
Firmware Version :		
1.0.0.13	Gate Way:	192 . 168 . 3 . 1

After selecting IP Configuration key in the IP Address of the USB 2.0 DEVICE SERVER box in the IP Address field followed by proper Subnet Mask & Gate Way as shown below.

mation —	Basic Settings IP Settings	Password
odel Name : MCS8140	🔽 Modify	
fac Address : DD:50:c2:11:70:2f	IP Configuration:	Static
erial Number :	IP Address:	192 . 168 . 3 . 24
60000	Subnet Mask	255 . 255 . 255 . 0
irmware Version : 1.0.0.10	Gate Way:	192 . 168 . 3 . 1

After entering IP address, Subnet Mask & Gate Way then click on "save" button. Then USBIP Admin shows a progress bar, after the process is finished, the following message box will be displayed.

USBIP A	dmin 🛛 🔀
(j)	Server (192.160.3.24) configuration saved successfully !!

Note: Every unit in the network is identified by its IP address. The utility treats each IP address as unique device. If the IP address of the box is modified, the software treats the same box as a different device and will open a Found New Hardware Wizard.

Continue the Found New Hardware Wizard to install the Virtual USB-over-IP bus driver.

Now USB 2.0 DEVICE SERVER box appears with changed IP Address under USBIP Admin utility.

Password:

The Password Settings page allows you to change or Enable/Disable password of the USB 2.0 DEVICE SERVER box. The Password settings page will be as shown below.

ormation	Basic Settings IP Settings Password
4odel Name : MCS8140	
fac Address :	₩ Enable Password
00:50:c2:1b:70:2f	
erial Number :	☐ Modify
60000	New Password :
irmware Version ;	
1.0.0.13	Confirm Password

Check the Modify box to Enable or Disable password option to USB 2.0 DEVICE SERVER box.

2.3.2. Firmware Upgrade

The USB 2.0 Device Server Firmware can be upgraded remotely using the Firmware upgrade option. Select the server on the Server manager. Right Click on the server and Select Upgrade Firmware option to upgrade the firmware.

~~ •	rver Manager	⊻jew <u>H</u> elp				
) 🛎 🕄) 	Serve	er Manager - Fou	ind 1 Sei	vers(s	;)
Stor.	S.No.	Model	MAC Address	IP Addr	ess	Status
Device Mapping	1	MCS8140-1	0-50-c2-1b-70-2f	192	Search S	5ervers
\checkmark					Upgrade	: <u>F</u> irmware
Server Manager				÷		onfiguration

Select the file to be upgraded by click on the Browse option in the "Select File" dialog as shown below.

ve File <u>P</u> ath		
D:\13July_2007\upgrade.	tar.bz2	<u>B</u> rowse
		2005

An upgrade.tar.bz2 file is required to upgrade the firmware. The upgrade .tar file can be downloaded from our website **www.lindy.com.**

Click on "Transfer" to upgrade the firmware. A firmware upgrade status is displayed which automatically relinquishes once the transfer is completed.

S.No.	IP Address	% Completion	Status
1	192.168.3.22	Uploaded - 100%	Uploading

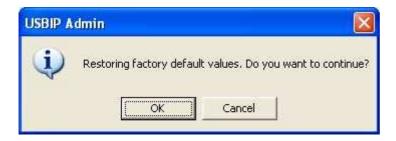
As soon as the transfer is completed, the USB 2.0 DEVICE SERVER USB server box automatically restarts to apply the upgraded firmware settings.

2.3.3. Restore factory defaults

Right click on the USB 2.0 DEVICE SERVER in the Server Manager Window and select the Restore Factory Defaults function to obtain Default settings as shown below.

193	1	Serve	r Manager - Fou	nd 1 Servers(s)	(Server Details	
A.	S.No.	Model	MAC Address	IP Address	Status		
rvice Macoing		MCS81401	0.50 c2 16 70.21	Search Servers Junicels Upgrade Ennuar	See.		
				Server Configure			
						Connected Clients (IP : USB Port)	
02-0	Ate : Time		Found		2		
02-00 02-00 02-01 02-01 02-01	3 2007, 17:05:05 3-2007, 17:41:38 3-2007, 10:30:56 3:2007, 18:43:36 3:2007, 18:56:20 3:2007, 18:56:21 3:2007, 10:59:24	Server (1 Server (1 Server (1 Restoring) Restore la	82.168.3.22 configuration 92.160.3.22 configuration 82.168.3.24 configuration acting default values clory default values succes	saved successfully # saved successfully #			

Then USBIP Admin Utility pops up a window asking for to continue or not. If we select Ok button it will get default settings.



2.4. Printer Auto-Connect:

USB Admin Utility enables Printers be shared between multiple clients making it a bidirectional Print Server. In order to share the printer between multiple clients the user may need to connect the printer at least once to install the driver for the Printer.

Once the printer is enumerated disconnect the Printer form the Device Mapping Window, Select the

Printer Auto Reconnect button

on the Menu bar to open the Printer Auto-Connect Window.

🥩 Printer AutoC	onnect		
computer every tir Please make sure (before enabling Au	Conrect feature, automatically Connects and E me you give a print. your printer has been setup and configured pr uto Connect for your printer. onnect, click the check box next to your Printe	operly to print from yo	Sik anna
	Printer Name	ServerIP	Port
	☑ EPSON Stylus C87 Series	192.168.3.22	258
~~	c		>
		Save	X Exit

Select the Printer which was connected and Click on "Save" and close the Window.

Once the Printer is configured for Auto-Connect mode, It remains free as long as the Printer is connected and becomes "Busy" only when a user prints to the printer connected.

Multiple User print jobs will be executed on a time sharing basis.

3. Web Server

The USB 2.0 DEVICE SERVER Combo has a user-friendly web browser interface to configure the box.

To open the web interface just type the IP address of the box, i.e: http://192.168.3.22:901 in the browser. (Make sure that the proxy server is disabled on your PC's Internet explorer).

A dialog prompts for the username and password. The username is "**root**" and the default password is "**combo**".

Connect to 19	2.168.3.22
Secure-NAS User name: Password:	
	<u> Remember my password</u> OK Cancel

If the authorization has been successful, the home page of the USB 2.0 DEVICE SERVER NAS application will be visible as shown below.

Moschip Socure-HAS Windows Internet Explorer	
€ ZERINSHIGGENEON	K (fr X) Uve Search
Machip SecretAS	🔂 • 🔝 🛛 👾 • 🖓 Boor • 🕼 Tools •
	Secure-NAS
Home Network Secure-NAS Virtual USB	
ease choose a configuration action using one of the above tabs. About	
 Secure-NAS webserver is a configuration utility for creating network shares from the disks connected to the box. eatures 	
Wired as well as Wireless configuration.	
 Supports various filesystem types. IPSec configuration for secure access over the wire. 	
 nade resulting ensuing develop available mail with 	
	Maschip Semicoriductar Tech. Ltd Courteau: http://www.aamba.org

3.1. Network Settings

The "Network" tab allows you to configure both wired as well as wireless interfaces. For the wired side we can configure the Static IP manually or set the box to automatically obtain an IP address by setting to the Dynamic (DHCP) mode. (Make sure that the DHCP server should be in ON).

🖉 Moschip Secure-NAS - Windows Internet Explorer	
🚱 🕞 👻 [#] http://192.160.3.22:901/network	[4] [X] Inviteiriti [P].
₫.•	
🚖 🗇 🕼 Moschip Secure 4AS	🗿 + 🔝 👾 + 🖓 gage + 🕲 Tgols + *
	Secure-NAS
Home Network Secure NAS Virtual USS	
Network Settings	
Select network interface type: 🙆 Wired LAN 👘 Wireless LAN	
Wired Configuration	
Select Server IP Type: Static C Dynamic(OHCP)	
Static IP address : 192.168.3.22	
Subnet Mask : 255.255.0	
Default Gateway : 192-168.3.1	
Commit	
CONTRACT	
	Munichip Bernicanductor Techi Ital Courtesys http://www.samba.org
	🧔 🎯 Internet 🔍 100% 👻

If the user selects the Network Interface type as "Wireless LAN" the browser shows the Wireless configuration web page as shown below.

🔄 🕞 🔹 🖉 http://192.160.3.	we Internet Explorer	🖉 🌆 😽 🔀 Uni Search
Contraction and the second sec	2:301/network_wn	Marrie A Die Servi
		Die and Children and
V 🕸 ØHoschip Secure-NAS		🖗 · 🗊 - 🖷 · 🖸 top · 🕲 to
		Secure-NA
nome Network	Secure-NAS Virtual USB	
	ppe: [^] Wired LAN [6] Wireless LAN	
Select Server IP Type:	Static C Dynamic(DHCP)	
Static IP address :	192.168.11.2	
Subnet Mask :	255.255.255.0	
Default Gateway :	192.168.11.1	
	G any C Select	
WI-F) Router Name :	Pion Cion	
Encryption :	C ASCII key C HEX Key	
Encryption : Key Type :		
Encryption : Key Type : Key Value :	C ASCII key C HEX Key	
Encryption : Key Type :	C ASCII key C HEX Key	
Wi-Fi Router Name : Encryption : Key Type : Key Value : Commit	C ASCII key C HEX Key	

Select the Server IP Type, and select Static in order to change the *IP address, Subnet mask* and *Default Gateway* of the Box. If the choice is made as "*Dynamic (DHCP)*", the box will automatically try to get an IP Address from the wireless router available.

In the Wireless configuration the application can also list the Wifi access points available in the network in the *Wi-Fi Router Name*.

If the choice has to be made to connect to a specific Wireless Router or access point choose "Select" radio button and select the Wireless router in the dropdown menu.

3.2. Secure NAS Settings

The web-server has separate webpage to configure Secure NAS. Click on the Secure-NAS tab to view the secure NAS settings in the Combo NAS USB IP solution.

Moschip Secure-MAS - Windows Internet Explorer	
0 + @ Http://192.168.3.22.901/MA5	A [tri]X [Lee Seath
Becure NAS	A · D · A · D Ever · O Tork ·
	Secure-NAS
Home Nature's Secure:HAB Virtual USS Nares Ubers FTP Security Status	
nare Parameters	
Inter a Iven Share Name Create Share Belect To Edit Share Share Select To Delete Share G Delete Share	
Partition Name Size Used Free Used%s Ingston_DataTraveler/tim_5571400012_1 1.90 59.2M 1.90 3%s ingston_DataTraveler_tig_587618002439_1 1.9G 956.6M 948.6M Softs	
	Hasdrap Semiconductor Tech. Ltd Doutrey / http://www.hamba.org

3.2.1. Shares setting

The "Shares" tab is for creating/editing/deleting a share. A share is the partition of the disk that you want others in the network to access. When a disk is connected to the NAS box the partitions and their statistics will be shown in this page.

C Moschip Secure MAS - Windows Internet Explorer	
00 + (#) http://192.160.3.222/901/MAS	🖌 😽 🕹 🖂 🖌 🖉
\$r	
🚖 🖗 💋 Mostep Jecure NAS	lig + ⊡ 📾 + ⊡eser + 🛛 tools + "
Nume Network Banane-RAS Victual USB	Secure-NAS
Shares Users ITP Decures Status	
Share Parameters	
Enter a New Share Verne Select To Edit Share V Select To Delete Share V Select To Delete Share V	
Parttion Name Size Used Pree Used% Pingston_DateTravierNim_S6714.000112_1 1.9G 50.3H 1.9G 3% Kingston_DateTravier_2-0_567618002439_1 1.9G 95.8H 648.9H 50%	
	Mostibip Kern-Londonius Tach, List Courtesy, MQL/Yever, Kernba-Org

Specify the name in the "Enter a New Share Name" field to create a new share. If you have already created a share then they will be shown in the "Select to Edit Share" and "Select to Delete Share" lists that will allow you to edit/delete the shares.

When you click "Create Share" the parameters required for creating a new share are displayed.

	192.168-3-22/901/shares		😭 🔂 🗙 Lier Barth	2
h -				
🖌 🕼 🕺 🖓 Moschip Se	cureNAS		Ø-8 #-9m-0	Tgols +
			Secure-NA	
Home N Shares Disers FT	setwork Secure-NAS # Security Status	Vinuel USB		
Share Parameter	rs			
Enter a New Share No	me	Create Share		
Select To Edit Share	pendrive1 😽	Edit Daare		
Select To Delete Shan	* pendrive1 *	Delate Pare		
and the second second second second	s for : pendrive1 Kingston_DataTraveler	Mm_587314000112_1 🚿		
Select Partition	COLUMN STRUME STRUME STRUME			
Select Partition: Base.Options comment	COLUMN STRUME STRUME STRUME	(optional)		
Select Partition Controns comment Security Options validusers	Kingston_DataTraveler			
Select Partition Base Dotions comment Security Options validusers readonly	Kingston_DataTraveler	(optional)		
Select Partition Base Dottons comment Security Options validusers readonly guestok	Kingston_DataTraveler	(optional)		
Select Partboon Base Options sommert Security Options validusers readonly puettok Browse Options browseeble	Kingston_DataTraveler	(optional)		
Select Partboon Base Dations comment Security Obligons validusers readonly guestsk Browse Options browseble Miscellaneous Option	Kingston_DstaTraveler	(optional)		

Once a share is created by some the name (Ex: "flash_drive"), then you will be prompted to enter the parameters for the share.

- Select Partition: Select the partition which you want to access with the given share name.
- **Comment:** Comments that you want to give for a share (optional setting)
- Validusers: Give the users separated with commas who are authorized to access this share. If no user is listed then all will have access to that share. (optional setting)
- **Readonly:** Set read/write permissions for the share. Default is "No" which is read/write permission.
- **Guestok:** Access the share with no password with account specified under *guest account*.
- **Browseable**: This controls whether this share is seen in the list of available shares in a net view and in the browse list.
- **Available**: This parameter lets you "turn off" a service. If *available* = *no*, then *ALL* attempts to connect to the service will fail

For normal use you need not edit any parameters except selecting the required partition. Click on "Commit Parameters" button and your share will be ready.

3.2.2. User Settings

In the "Users" tab you can add/delete/enable/disable a user. You can also change the password for a specified user. The list of registered users will be displayed at the bottom. Enabling/Disabling a user means if a user has been created and you want the user not to access any share then you can disable that user. Means he will not be entirely deleted but only restricted to access any share.

Muschip Secure NAS Windows Interr	net Explorer		
(3) + p http://192.168.3.22:901/pans	ed	S [fs] X [De Sauth	P -
👷 🕼 🧭 Moschip Secure-NAS		@•@ ⊕•6	Enge • 🔘 Tgols • "
		Secur	e-NAS
Home Network Se Shares Useral FTP Security Statu	scure-HAS Vinual USB		
Server User Management			
User Name I New Password I Re-type New Password I	Passympt should be minimum I characters and manimum I characters		
S.No. Registered User(s)			
		Historija Selmin Countraja: Mbp	nindiaitain Tech- Ltit 1//www.sambia.org
			(=
Dane		👩 🖨 Sternet	·** 100% ·

A username "moschip" is by default present, which is shown in the Registered User(s) table.

3.2.3. IPSec Security Settings

In the "Security" tab you can configure a VPN with a client for secure access to the box. The box uses IPSec for establishing a VPN.

			V W X I in teach	- I K
and 12 https://www.	166.3.22 901/hetwork_security		COLUMN TELEVISION	P .
6) •				
🛜 🕸 👹 Moschip Secur	e-1465		Ø• © ⊕•∂∞••Ø	191010
		· · · · ·	Secure-NA	
Shares Moors FTP	work Secure NAS Security Status	Vizial QSB		
PSec Settings				
IPSec Connection:	C Enable	•		
Encryption: Authentication:	1005 1015 1015 101	[C] A85192 [C] A85256		
Key Management:	Auto (IKE) 💌	Apple		
PFS:	CEnable	(Disable		
Preshared Key:	moschip			
Key Life Time:	3600			
Connection Status:	Disconnected			
Comment				
			Heedle-Semiconductor 1e Couteau/http://www.eem	291, 3,312 104-0714
				1

By default the security will be disabled. Then we have the encryption and authentication settings. The USB 2.0 DEVICE SERVER NAS will support 3DES, AES128, AES192 and AES256 encryption techniques and MD5, SHA1 authentication techniques.

Encryption:	🖸 3DES	O AES128	O AES192	O AES256
Authentication:	MD5	O SHA1		

The "Key Management" allows setting the type of key management whether Auto IKE (Internet Key Exchange) or "Manual".

In the below figure the "Auto (IKE)" is selected. Under this you have an option for enable/disable PFS (Perfect Forward Secrecy) which is useful for key exchange. The "Pre-shared Key" field is to specify what key to use and the "Key Life Time" field is the amount to specify the key lifetime in seconds.

Key Management:	Auto (IKE) 🔽	Apply
PFS:	C Enable 💿 Disable	
Preshared Key:	moschip	
Key Life Time:	3600	

The below figure is the "Manual" configuration of Key Management. Here we have to specify the "Encryption Key" as well as the "Authentication Key". Apart from these we have a SPI (Security Parameter Index) field with which the SA's (Security Associations) will be identified.

Key Management:	Manual 💌	Apply
Encryption Key:	ABCDEFGHIJKLMNOPÇ	
Authentication Key:	ABCDEFGHIJKLMNOP	
SPI:	0x100	(0x100 to 0xfff)

The connection status (Disconnected/Connected) will be displayed at the bottom in red.

Connection Status: Disconnected

Please check the <u>Appendix section</u> to know on how to configure IPSec on a Windows XP machine.

3.2.4. The Status page

In the "Status" tab you can view the NAS server status, active connections, active shares and opened files in a very informative way.

🖉 Moschip Secure HAS - Windows Internet Explorer		
🚱 😳 🔹 🙋 http://192.368.3.22:901/status	💌 🤧 😽 Urer Search	8-
ۥ		
A A Moschip Secure NAS	0 • 0 ₩ • 0	Eage • 🔘 Tgols • "
	Secure	e-NAS
Home Netrock Secura-IIA5 virtual US8 Sharea Users FTP Security Status		
Server Status Refresh Interval: 30 Auto Rafresh File server Manageri running Sees Restart		
Network Nanager: running Stop Restart		
Active Connections		
PID Client IP address Date Kill 2869 moschip-f9116c0 192.168.2.30 Thu Jan 1 00:10:52 1970 y		
Active Shares		_
Share User Group PID Client Date k1 moschip 3859 moschip-19116d0 Thu Jan 1 00:10:56 1970 IPC# moschip 2869 moschip-f9116d0 Thu Jan 1 00:10:52 1970		
Open Files		
PID Sharing R/W Oplock File Date		
	the second se	
http://192.168.3.22:901/status	🔞 🚱 Internet	5, 100% -

The "Auto Refresh" button when clicked will keep on refreshing the page based upon the given refresh time interval.

The "Active Connections" will display the IP addresses and the PC names that have connected to the NAS box. In the "Kill" column you can close a connection by clicking "X" mark. But the client can reestablish the connection.

The "Active Shares" page will display which share is accessed by which client. The "Open Files" will display which files are currently opened by which client. The file permissions are also displayed here.

3.3. Virtual USB-IP Settings

The web-server has separate webpage to configure Virtual USB server settings. Click on the Virtual USB tab to view the USB server settings in the Combo NAS USB IP solution.

Moschip Socure-NAS Windows Internet Explorer	× + × uv Seath
0.	M(M) V Presson
na 😰 🍻 👰 Moschip Secure-HAS	🚱 • 🛐 🛛 👘 • 📄 Boor + 🔘 Tools •
	Secure-NAS Version 0.0.4
Home Network Secure-Nuts Virtual USB Introduction Device-Retus Upgrade	
Introduction	
About	
© USB over IP enables working with the remote USB devices over a local network or Internet.	
Features	
 Allows USB Devices to be used and shared by client PC's on LAN. 	
 Supports wide variety of USB devices. 	
© Supports both Ethernet and Wilh networks .	
O Supports printing to USB printer from both Wired and Wireless Interface.	
© Supports printer auto-reconnect while sharing the printer from Client PC's.	
© Supports auto sharing of USB devices.	
© Supports USB device safe removal.	
© User-Friendly Application interface.	
	Mosthip Semiconductor Tech. Ltit
rtp://192.168.3.22:901/vsb	100% •

3.3.1. The Status Page

	crons win	dows Internet Explore	11			
🚨 🖂 🖕 👘 u	tp://192.168.1	3.22:901/vuskstatus?refres	h_interval=200eofre	h=1	 [4] [X] Los South 	P
Ø.						
🖗 💠 🧭 Mosch	ip Secure-NAS	u.			Å•⊡ ⊕•⊇ev••0	
					Secure-NA	
Home Introduction (De	Netvork vice-Satu	Secure-NAS N Upgrade	Virtual Of	8		
/irtual USB D						
This Page Display	s Status of \	/intual USB devices				
S.No VID	P10	CLASS	PEER JP	STATUS		
1 0x41e 2 0x5ac	0x4029 0x1209	WebCem VistePro iPod	192.160.3.30	BUSY BUSY		
	Constantial Service					
					Masship Semiconductor T	ech. Ltd
					Meaship Semiconduster T	ech. Ud
					Meaship Semiconductor T	ech. Ud
					Masship Samiconductor T	ech. Ud

The status page displays the current status of the USB devices attached.

- Device Status:
- Vendor Id
- Product Id
- Class Id
- Peer-ip address
- Status

This status page is updated automatically every 10 seconds and it shows the device connected to USB 2.0 DEVICE SERVER board.

The Device Status table shows the Vendor Id, Product Id, Class, Peer-IP and the Status of the Device connected. The Peer-IP is the IP Address of the computer on which the device is currently accessed. Whenever any Device is Busy the Status of that device changes to "BUSY" and whenever it is not being used it changes to "FREE" as shown below.

s.no	vid	pid	class	peer ip	status
1	0x46d	0x92f	Camera	0.0.0.0	FREE
2	0x58f	0x6387	Mass Storage Device	192.168.3.23	BUSY
3	0x4b4	0x6830	USB2.0 Storage Device	192.168.3.23	BUSY
4	0x58f	0x6387	Mass Storage Device	0.0.0.0	FREE

3.3.2. The Upgrade Page

The Upgrade page allows you to upgrade the firmware.

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🗿 🕢 🔹 👔 http://192.168.3.22.993/upgrad	f.	😽 🖓 🐼 London	P
to •			
A A Moschip Secure-NVS		🕅 * 🗐 🚔 * 🖓 BAR * (🗋 Tgols -
		Secure-N	
Introduction Device-Status Upgrade	reals Uting use		
pgrade			
Please specify the file name:	Browse		
2			
upgrade dear			
II SERVICES IN SECTION			
		Neodhu Bermandudar	Tech. Ibd
		Neodiu Servenindudar	Tech. Lhi
		Neodia: Bernandudar	Tech. 154
		Neochu Bernanducker	Tech. Dd
		Neochy Permanductor	Tech. Ltd.

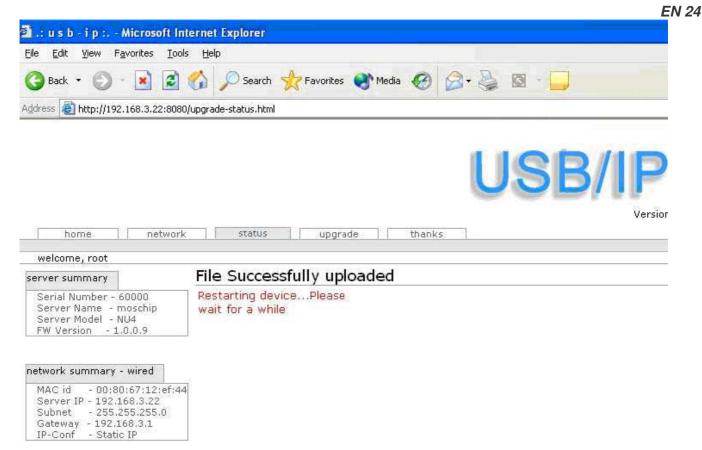
Select the file to be upgraded by click on the Browse option on the Upgrade page as shown below.



A file named upgrade.tar.bz2 file is required to upgrade the firmware. If one is availableThe upgrade .tar file can be downloaded from the LINDY website, www.lindy.com.

🗿 .: u s b - i p : Microso	off Internet Explorer
<u>File Edit View</u> Favorites	<u>T</u> ools <u>H</u> elp
🔇 Back 👻 🕥 - 💽	🗟 🏠 🔎 Search 👷 Favorites 🜒 Media 🚱 🙆 + 🥁 🔯 🔹 🗖
Address 1 http://192.168.3.2	2:8080/upgrade.html
home ne welcome, root	twork status upgrade thanks
server summary	Upgrade
Serial Number - 60000 Server Name - moschip Server Model - NU4 FW Version - 1.0.0.9	Please specify the file name: C:\Documents and Settings\pavan\Desktop Browse
network summary - wired MAC id - 00:80:67:12 Server IP - 192.168.3.22 Subnet - 255.255.255 Gateway - 192.168.3.1 IP-Conf - Static IP	

Click on "upgrade" to upgrade the firmware

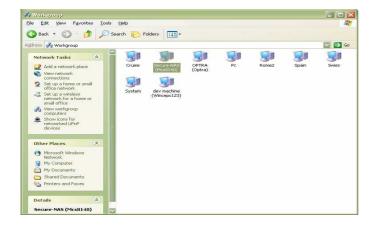


A file successfully uploaded message is displayed and the webpage also indicates that the USB 2.0 DEVICE SERVER box is restarting to apply the upgraded firmware settings.

4. Accessing the Network drive

Ensure the PC IP Address and Box IP Address is in the same subnet. The network drive will be available on "My Network places" of Windows operating system.

Goto My Network places> Entire Network>Workgroup>mcs8140 as shown below to access the network drive on USB 2.0 DEVICE SERVER.



Shortcut: Goto Programs > Run. Type the IP address of the unit in the Run Dialog as show below.

Run	2 🛛
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	1192.168.3.22
	OK Cancel Browse

OR

Type the box name in the Run dialog as follows: \\mcs8140

Radio Frequency Energy, Certifications

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received, including interference that may cause undesired operation.

CE Statement, EMC Compatibility

This device complies with EN Standards EN55022 and EN55024 according to the relevant EC EMC Directive. It must be used with shielded cables only to maintain EMC compatibility.

Dieses Produkt entspricht den einschlägigen EMV Richtlinien der EU und darf nur zusammen mit abgeschirmten Kabeln verwendet werden.

LINDY Herstellergarantie

LINDY gewährt für dieses Produkt über die gesetzliche Regelung hinaus eine zweijährige Herstellergarantie ab Kaufdatum. Die detaillierten Bedingungen dieser Garantie finden Sie auf der LINDY Website aufgelistet bei den AGBs.



WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. The wheelie bin symbol shown indicates that this product must not be disposed of with household waste. Instead the product must be recycled in a manner that is environmentally friendly. For more information on how to dispose of this product, please contact your local recycling centre or your household waste disposal service. Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products.

More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland

Die Europäische Union hat mit der WEEE Direktive umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24.März 2006 an das Entsorgen von Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

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